

Application No. 09/982,489
Amendment dated April 1, 2005
Reply to Office Action of December 1, 2004

Docket No. 0739-0132P
Art Unit: 3725
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AMENDMENTS TO THE DRAWINGS

One sheet of replacement drawings is attached (FIG. 7), in order to properly label conveying means 89, 89a, 89b.

REMARKS

The Applicant thanks the Examiner for the thorough consideration given the present application. Claims 1-18 are pending. Claims 1-18 are amended. Claims 1 and 18 are independent. The Examiner is respectfully requested to reconsider the rejections in view of the amendments and remarks set forth herein.

Claim for Priority

The Examiner has acknowledged the Applicant's claim for foreign priority based on the German Patent Application filed on October 17, 2000. A certified copy of the priority document will be submitted in due course.

Objection to the Specification / Substitute Specification

The Examiner has objected to the specification asserting, "there is no description of a device for optoelectronic monitoring and post-sorting means".

In response, the Examiner is directed to FIG. 7, as well as to page 15, line 12, to page 16, line 2 of the specification, which illustrate and describe optoelectronic monitoring and post-sorting means 85, 85a, 85b.

Further, in accordance with MPEP §608.01(q), the Applicant herewith submits a substitute specification in the above-identified application. Also included is a marked-up copy of the original specification, which shows the portions of the original specification, which are being added and deleted. The Applicant respectfully submits that the substitute specification

includes no new matter and that the substitute specification includes the same changes as are indicated in the marked-up copy of the original specification showing additions and deletions.

Because the number of amendments, which are being made to the original specification, would render it difficult to consider the case, or to arrange the papers for printing or copying, Applicant has voluntarily submitted this substitute specification. Accordingly, Applicant respectfully requests that the substitute specification be entered into the application.

Claim Objections

The Examiner has objected to claims 4, 6, 7, and 13 for failing to further limit the subject matter of a previous claim. In order to overcome this objection, Applicants have amended claims 4, 6, 7, and 13 in order to address the issues pointed out by the Examiner. Reconsideration and withdrawal of this objection are respectfully requested.

Amendments to the Drawings

One sheet of replacement drawings is attached (FIG. 7), in order to properly label conveying means 89, 89a, 89b.

Rejections Under 35 U.S.C. § 112, first and second paragraph

Claims 1-17 stand rejected under 35 U.S.C. § 112, first paragraph; and claims 1-18 stand rejected under 35 U.S.C. § 112, second paragraph. These rejections are respectfully traversed.

In order to overcome this rejection, the Applicant has amended claims 1-18 to address each of the issues pointed out by the Examiner. The Applicant respectfully submits that the claims, as amended, particularly point out and distinctly claim the subject matter, which Applicants regard as the invention. Accordingly, reconsideration and withdrawal of these rejections are respectfully requested.

Rejections Under 35 U.S.C. §103(a)

Claim 1 and 11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ellers et al. (U.S. 5,524,838) in view of Bonnet (U.S. 5,368,240);

claims 2-5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ellers et al. in view of Bonnet, and further in view of Schorsh et al. (U.S. 4,084,387); and

claim 18 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Schorsh et al. in view of Hayashi et al. (U.S. 5,431,347).

These rejections are respectfully traversed.

Further, the Examiner states that claims 6-10 and 12-17 have not been examined on the merits because they are incomprehensible.

Amendments to Independent Claim 1

While not conceding the appropriateness of the Examiner's rejection, but merely to advance prosecution of the instant application, independent claim 1 is amended herein to recite a combination of elements directed to a system for processing a material, including *inter alia*,

a multi-stage pre-reduction system;

a multi-stage freeze system having freezing means for freezing the material to a brittle temperature, the multi-stage freeze system being connected downstream with respect the pre-reduction system; and

a pre-classifying system being connected downstream with respect to the multi-stage freeze system, and a plurality of fine reducers for reducing the material, the fine reducers being arranged in parallel and connected downstream with respect to the pre-classifying system;

wherein the material to be processed enters the multi-stage pre-reduction system, then is transported to the multi-stage freeze system, then is transported to the pre-classifying systems, and then is transported to said plurality of fine reducers.

Support for a pre-reduction system 10, freeze system 30, temperature equalizing system 33, pre-classifying system 60, and multi-stage fine reducers 102, 102b, can be seen, for example, in FIGS. 1, 2, 5, and 8, respectively.

By contrast, as can be seen in Ellers et al. FIG. 1, this document merely discloses shaker tables 23, 26, and sifters 33, immediately prior to package 34. Ellers et al. fail to

suggest multi-stage fine reducers connected downstream to the pre-classifying system, as in claim 1.

Further, as can be seen in Bonnet FIG. 1, this document merely discloses material in main cooling tunnel 12, through discharge aperture 43, and then directly into crushing means 46. Bonnet, as with Ellers et al., fails to suggest multi-stage fine reducers arranged in parallel and connected downstream to the pre-classifying system, as set forth in claim 1.

Therefore, independent claim 1 is in condition for allowance.

Amendments to Independent Claim 18

In a similar manner, independent claim 18 is amended herein to recite a combination of elements directed to a system for processing a material, including *inter alia*,

a pre-reduction system;

a freeze system divided into a plurality of freeze zones for spraying a low temperature refrigerant onto the material;

a temperature equalizing system;

a pre-classifying system being connected downstream with respect to the temperature equalizing system; and

multi-stage fine reducers arranged in parallel for stepwise reduction of the material,

wherein the pre-reduction system, the freeze system, the temperature equalizing system, the pre-classifying system, and the multi-stage fine reducers are connected sequentially in this order.

Support for a pre-reduction system 10, freeze system 30, temperature equalizing system 33, pre-classifying system 60, and multi-stage fine reducers 102, 102b, can be seen, for example, in FIGS. 1, 2, 5, and 8, respectively.

By contrast, as can be seen in Schorsch et al. FIG. 1, this document merely discloses a freeze drum 10, crusher 92, and magnetic conveyor 94. As such, Schorsch et al. fail to suggest multi-stage fine reducers arranged in parallel and connected downstream to the pre-classifying system, as set forth in claim 18.

Further, as can be seen in Hayashi FIG. 2, this document merely discloses material in pre-treatment apparatus 3, foaming agent collecting apparatus 19, metal sorting apparatus 9, and plastic sorting apparatus 12. Hayashi, as with Schorsch et al., fails to suggest multi-stage fine reducers arranged in parallel and connected downstream to the pre-classifying system, as in claim 18.

Applicants respectfully submit that the combination of elements as set forth in each of independent claim 18 is disclosed or made obvious by the prior art of record, including Schorsch et al. and Hayashi, at least for the reasons explained above.

Therefore, independent claim 18 is in condition for allowance.

Amendments to Dependent claims 2-17

The Examiner rejected claims 2-5 under 35 U.S.C. §103(a), and has not examined claims 6-10 and 12-17, alleging that they are incomprehensible.

While not conceding the appropriateness of the Examiner's positions, dependent claims 2-17 are amended to place them in better form.

It is respectfully requested that the Examiner promptly consider 6-10 and 12-17 as required.

In view of the fact that dependent claims 2-17 now depend from an allowable independent claims, or due to the additional novel features set forth therein, the Applicant respectfully submits that each of these claims is in condition for allowance.

The rejection of dependent claims 2-5 under 35 U.S.C. §103(a) is now moot.

All claims of this application are now in condition for allowance.

Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. §103(a) are respectfully requested.

CONCLUSION

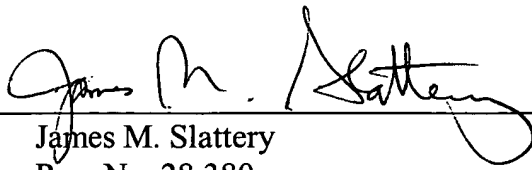
Since the remaining patents cited by the Examiner have not been utilized to reject claims, but merely to show the state of the art, no comment need be made with respect thereto.

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. It is believed that a full and complete response has been made to the outstanding Office Action, and that the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, he is invited to telephone Carl T. Thomsen (Reg. No. 50,786) at (703) 205-8000.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,
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Attachments: Substitute Specification
 Marked-Up Copy of the Substitute Specification
 One Sheet of Formal Drawings - Figure 7 (Replacement)